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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/068,039

02/05/2002

Ernest C. Chen

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11/10/2005

THE DIRECTV GROUP INC

PATENT DOCKET ADMINISTRATION RE/R11/A109

P O BOX 956

EL SEGUNDO, CA 90245-0956

EXAMINER

TORRES, JUAN A

ART UNIT

PAPER NUMBER

2631

DATE MAILED: 11/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action  
Before the Filing of an Appeal Brief**

Application No.

10/068,039

Applicant(s)

CHEN ET AL.

Examiner

Juan A. Torres

Art Unit

2631



**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 26 October 2005 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☐ The period for reply expires \_\_\_\_\_ months from the mailing date of the final rejection.  
b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**NOTICE OF APPEAL**

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

**AMENDMENTS**

3. ☒ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because  
(a) ☒ They raise new issues that would require further consideration and/or search (see NOTE below);  
(b) ☐ They raise the issue of new matter (see NOTE below);  
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: See Continuation Sheet. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).  
5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
7. ☐ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.  
The status of the claim(s) is (or will be) as follows:  
Claim(s) allowed: \_\_\_\_\_.  
Claim(s) objected to: \_\_\_\_\_.  
Claim(s) rejected: \_\_\_\_\_.  
Claim(s) withdrawn from consideration: \_\_\_\_\_.

**AFFIDAVIT OR OTHER EVIDENCE**

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).  
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

**REQUEST FOR RECONSIDERATION/OTHER**

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: see attachment.  
12. ☒ Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s). \_\_\_\_\_.  
13. ☐ Other: \_\_\_\_\_.

Continuation of 3. NOTE: the proposed amendments raise new limitations that will require further consideration and/or search.

## **DETAILED ACTION**

### ***Response to Arguments***

Applicant's arguments filed 10/26/2005 have been fully considered but they are not persuasive.

Regarding claims 31 and 36:

The Applicant contends, "Ishio and Anderson Both Fail to Teach a Modulation Map".

The Examiner disagrees and asserts, that, as indicated in the previous Office Action, Ishio discloses decoding the layered in-phase signal and the layered quadrature signal to produce a lower layer in-phase signal, a lower Layer quadrature signal, an upper layer in-phase signal and an upper layer quadrature signal, comprising modifying the upper layer in-phase signal and the upper layer quadrature signal to account for transmission distortions of the layered modulation signal to produce an ideal upper layer in-phase signal and an ideal upper layer quadrature signal (figure 5 block 21 column 4 lines 3-52). Ishio also shows the mapping in figures 2, 8, 9 and 13. If block 21 is not able to know the mapping will not be able to re-modulate the signal. The re-modulator 21 will eliminate the channel noise from the upper layer signal, mapping the received point to the most probable point in the transmitter constellation. For these reasons and the reason stated en the previous Office action, the rejection of claims 31 and 36 are maintained.

The Applicant contends, "Nothing in any of the cited references justifies a conclusion that a modulation map configured to modify the upper layer in-phase signal

and the upper layer quadrature signal to account for transmission distortions of the layered modulation signal”.

The Examiner disagrees and asserts, that, Ishio shows the mapping in figures 2, 8, 9 and 13. Ishio also show more complex mapping with 3 bits in figures 17 and 18. Anderson also shows a modulation map in figure 1. For these reasons and the reason stated en the previous Office action, the rejection of claims 31 and 36 are maintained.

The Applicant contends, “Ishio and Anderson Both Fail to Teach an A/D Converter Digitalizing Layered In Phase Signal and Layered Quadrature Signal”.

The Examiner disagrees and asserts, that, as indicated in the previous Office Action, Ishio discloses digitizing the layered in-phase signal and the layered quadrature signal (figure 5 block 16 column 4 lines 3-52, the detection circuit 16 will detect the signal that is a digital signal and will make a digital decision of the signal so it is digitalizing the received signal. As the title of the Ishio patent indicates the demodulator is for combined digital amplitude and phase keyed modulation signals. Anderson also discloses this element in figure 3 block 14). For these reasons and the reason stated en the previous Office action, the rejection of claims 31 and 36 are maintained.

The Applicant contends, “Ishio and Anderson Both Fail to Teach a Modulator for modulating the Lower Layer Analog Signal and the Lower Layer Quadrature Signal.”.

The Examiner disagrees and asserts, that, Ishio discloses modulating the upper and lower layer in-phase analog signal and the quadrature signals (figure 5 block 21 and figure 6 block 29; column 4 line 3 to column 5 line 10). For these reasons and the

reason stated en the previous Office action, the rejection of claims 31 and 36 are maintained.

The Applicant contends, "there is no Teaching to Modify Ishio and Taught by Anderson".

The Examiner disagrees and asserts, that as indicated in the previous Office action, Ishio and Anderson are analogous art because they are from the same field of endeavor; at the time of the invention, it would have been obvious to a person of ordinary skill in the art to incorporate in the receiver disclosed by Ishio the reception of non-coherence signals as disclosed by Anderson; the suggestion/motivation for doing so would have been to demodulate coherence and non-coherence signals reducing the cost of the decoder and to have compatibility with other systems (Anderson column 2 lines 46-61. For these reasons and the reason stated en the previous Office action, the rejection of claims 31 and 36 are maintained.

The Applicant contends, "Applicants know of no system that receives a layered modulation signal having two non-coherent layered signal (an upper layer signal non coherently layered with a lower layer signal) to produce both the received upper and lower layer signal".

The Examiner disagrees and asserts, that as indicated in the previous Office action, in response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir.

1986). For these reasons and the reason stated en the previous Office action, the rejection of claims 31 and 36 are maintained. A general argument that all the limitations are not described in a single reference does not satisfy the requirements of 37 CFR 1.192(c)(8)(iv). If a single reference contains all the limitations of the claim, the rejection will be under 35 USC 102.

The Applicant contends, "Ishio present a case of coherent signals for simplification, but the coherent of the signals is not important in his patent... This is a statement made in hindsight".

The Examiner disagrees and asserts, that as indicated in the previous Office action, in response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). For these reasons and the reason stated en the previous Office action, the rejection of claims 31 and 36 are maintained.

Regarding claims 33 and 39:

The Applicant contends, "Ishio says nothing about legacy and non-legacy signals. Anderson discusses the handling of legacy and non-legacy signals, but teaches that the two should be received by entirely different demodulators, non using non-

coherently layered modulation. Anderson, therefore teaches away from the Applicant's invention".

The Examiner disagrees and asserts, that, as indicated in the previous Office Action, in response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). For these reasons and the reason stated en the previous Office action, the rejection of claims 33 and 39 are maintained.

#### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Juan A. Torres whose telephone number is (571) 272-3119. The examiner can normally be reached on Monday-Friday 9:00 AM - 5:00 PM.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammad H. Ghayour can be reached on (571) 272-3021. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Juan Alberto Torres, Ph. D.  
11-01-2005

  
**KEVIN BURD**  
**PRIMARY EXAMINER**